United States Arsenal Main Building (now part of Porter Academy) 167 Ashley Avenue (Ashley Avenue, Bee, Doughty and President Streets) Charleston Charleston County South Carolina

HABS SC 10-CHAR, 183A-

HABS No. SC-294

PHOTOGRAPHS
WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
National Park Service
Eastern Office, Design and Construction
143 South Third Street
Philadelphia, Pennsylvania

# UNITED STATES ARSENAL MAIN BUILDING (NOW PART OF PORTER ACADEMY)

HABS SC 10-CHAR 188A\*

Address:

167 Ashley Avenue (Ashley Avenue, Bee, Doughty and President Streets), Charleston, Charleston

County, South Carolina.

Present Owner:

Medical College of South Carolina, 16 Lucas Street,

Charleston, South Carolina.

Present Occupant: Porter Academy.

Present Use:

Educational.

Brief Statement

A mid-19th century arsenal building, long the home

of Significance: of Porter Academy.

#### PART I. HISTORICAL INFORMATION

A. Original and Subsequent Owners: United States Government; granted to Trustees of the Holy Communion Church Institute by joint resolution of Congress, December 19, 1879. Name changed to Porter Academy in 1886. Sold to Medical College of South Carolina, August 30, 1963.

B. Date of Erection: 1844.

C. Architect: Edward Brickell White.

- D. Notes on Original Plan and Construction: Apparently first floor was divided transversely by an open passage and longitudinally by a bearing partition, and the upper floors were open.
- E. Notes on Known Alterations and Additions: Kitchen and pantry were added, storeroom converted into dining room and study hall, third story (and possibly second story) converted to dormitory, in 1880. Machine shop and manual training shop installed on second floor c. 1880. Four-story L-shaped addition built on south end in 1883 (upper two storics removed in recent years).
- F. Sources of Information: Two interior photographs of the second floor are reproduced in <u>Led On</u>, opposite pp. 374, 382. A. Toomer Porter, <u>Led On</u> (New York: G. P. Putnam's Sons, 1898).

News and Courier, Charleston, S. C., August 31, 1963. Ravenel, <u>Architects of Charleston</u> (Charleston: Carolina Art Ass'n, 1945).

## PART II. ARCHITECTURAL INFORMATION

#### a. General Statement

- 1. Architectural character: An interesting example of a Federal building for utilitarian military purposes.
- 2. Condition of fabric: Masonry is sound; wood and finish of upper two stories are deteriorating.

#### B. Technical Description of Exterior

- 1. Number of stories and bays, over-all dimensions, layout; Three stories. Main block--3 x 9 bays; about 36' x 110', three stories. Rectangular, with addition making the whole an L. South addition--about 36' x 54' and 36' x 42', 2 stories (now).

  There are also small one-story wings at each end.
- 2. Foundations: Low. Water table.
- 3. Wall construction finish, and color: Red. "Charleston" brick, of an English size, laid four courses to one foot. American bond, with every fourth course headers. Pilaster strips at each bay. Height--42' from water table to bottom of cornice; 20' from water table to bottom of second-floor window sills.
- 4. Structural system, framing: Brick-bearing exterior walls, wooden floor and roof framing. Second floor appears to be supported on a central bearing partition extending longitudinally; joists are 4" x 13", 21" on centers. A row of eight solid wooden Tuscan columns, extending longitudinally, supports a heavy timber girder which carries the joists for the third floor, which are 4" x 12", 24" on centers. The roof frame is of heavy timber trusses, with king post; it spans the whole depth of the building. Iron straps bind roof rafters to ceiling joists. Parts of the floor construction have deteriorated, apparently due to moisture from roof leaks at sometime.
- 5. Porches: A one-story porch, L-shaped in plan, extends along the west wall and the addition; it is of later construction than the original building. It has square brick piers, and a shed roof covered with sheet metal, somewhat corroded.

#### 6. Openings:

a. Doorways and doors: There is a central doorway on the east and the west walls; the two are identical.

An open passageway connects them at first-floor level. Tuscan pilasters and entablature frame a rectangular opening; this work is of gray granite, with moldings consisting of inclined planes (i.e., straight in profile).

b. Windows: First and second-floor windows are framed in semicircular blank brick arches. Window openings are rectangular with simple wood casings recessed. Lintels and sills are granite. Sash are inward-opening wood casement.

#### 7. Roof:

- a. Shape, covering: The main portion has a hip roof now covered with composition shingles. The addition now has a flat roof--formerly it had a mansard roof.
- b. Cornice: The cornice is of granite, apparently identical with that over the entrances.
- c. Cupolas: There is a central cupola; it is of wood, octagonal in plan, with an open gallery (now boarded up) and a low pyramidal roof.

## C. Technical Description of Interior

- 1. Floor plans: Main building-first floor: North and south halves are separated by an open passageway on axis, and divided down the center longitudinally. These spaces are divided into classrooms, storage spaces, and athletic facilities.

  Second floor: A number of rooms on either side of a longitudinal central hall.

  Third floor: Open. There are traces of former partitioning on walls. Second-floor ceiling height is 12'-6"; third floor, 11'-4".

  Addition: This is L-shaped; both floors are filled by a single room (on each).
- 2. Stairways: There is an L-shaped stair at each end of the main portion, in the west corners.
- 3. Flooring: First floor: Modern narrow pine boards. Second and third floors: 4-1/2" matched yellow pine boards, poor condition.
- 4. Wall and ceiling finish: Brick walls are plastered direct; partitions and ceilings are plastered on wood lath. Finish of third floor ceiling has been removed, and generally that on the upper floors is in poor condition.

UNITED STATES ARSENAL MAIN BUILDING (NOW PART OF PORTER ACADEMY)
HABS No. SC-294 (Page 4)

There are wainscots of vertical matched and beaded boards, apparently dating from c. 1880.

- 5. Doorways: Doorways have architrave trim of wood.
- D. Site: The building faces east. This building forms the central one in the whole group, being located somewhat west of the center of the block bounded by Ashley Avenue, Bee Street, President Street and Doughty Street. It dominates the east-west axis, with main elevations facing east and west.

Prepared by Harley J. McKee, Architect National Park Service August 1963.